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WISDOM IS COMMON SENSE TO AN UNCOMMON DEGREE

# THE REA LINEMAN

RURAL ELECTRIFICATION ADMINISTRATION

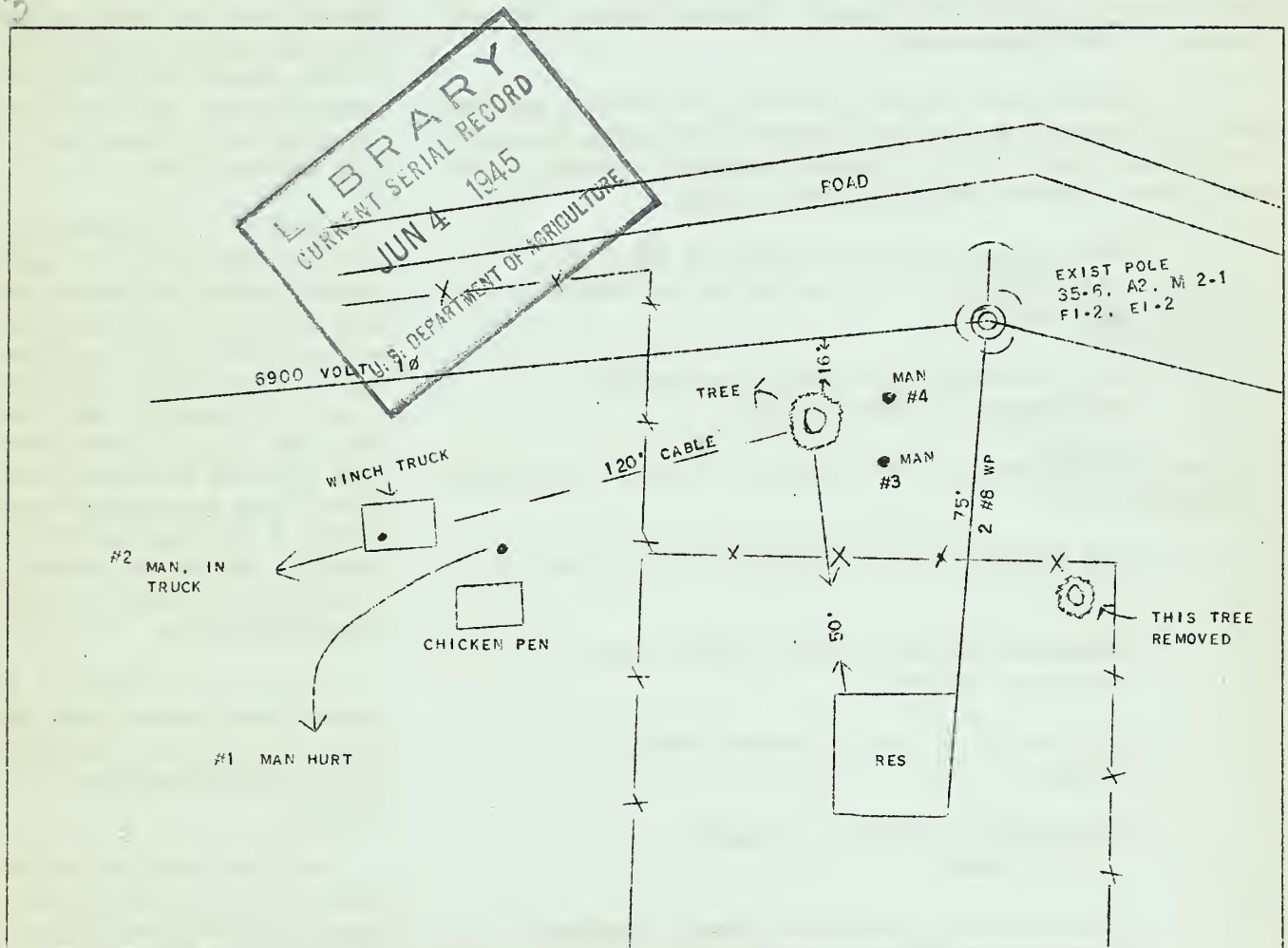
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## RESUSCITATION SAVES LINEMAN



### REPORT:

A crew of four men were removing two trees in a member's yard between the house and a 7,200-volt line. A winch truck was used to pull the trees in an open spot as they fell. One tree had been pulled in this manner and the winch line was attached to the second tree approximately 30 feet off the ground. When the second tree started to fall, a lineman standing near the truck grabbed the winch line and attempted to pull the tree a little far-

ther from the energized line. The tree hit the line and the lineman standing on the ground holding the winch line was knocked unconscious. The foreman administered artificial respiration immediately. After about ten minutes the injured man started to breathe and soon regained consciousness. He suffered some burns but returned to work in a few days.

(See "Life-Saving Medal" page 4)

Published Monthly in the Interest of Safety  
for Employees of REA Systems

David A. Fleming, Editor

## THE CHANCES ARE — — —

A few days ago we received a telegraphic report of an electric shock accident on a cooperative. The burns were very severe and a leg and an arm of the victim were amputated. Today we received a telegram informing us the victim had died.

Since electric shock accidents on co-op lines follow a set pattern, it is possible to judge the conditions surrounding the occurrence before we get the detailed report. We may be "sticking our neck out," but we believe we can presume the following:

1. Rubber gloves were not on the hands of the hands of the victim at the time he received the electric shock and burns.
2. The victim climbed much higher on the pole than was necessary to perform the work.

The chances of other conditions involved (based on REA accident frequency records):

1. One chance out of two a transformer location was involved.
2. One chance out of six a line tap jumper or disconnect was involved.
3. One chance out of seven a lightning arrester was involved.
4. One chance out of eleven the injured was on a tangent structure
5. Two chances out of three regular weekly safety meetings were not held on this cooperative.
6. REA's recommendation that rubber gloves be worn on all poles carrying energized circuits until protective grounds have been installed both ways in sight was not enforced on this cooperative.

We also believe we can say that rubber gloves on the hands would have prevented this occurrence. Our accident experience indicates that this statement is true on a very high percentage of the electric shock accidents that occur on REA cooperatives. Rubber gloves are your best protection. Wear them. Take care of them. Have them tested regularly.

## TEXAS ICE STORM PROVES VALUE OF JOB TRAINING

North Texas cooperatives suffered the most severe weather damage during the month of March that has been experienced during their entire history.

About midnight February 26, it started to rain and freeze. Everything accumulated a heavy coating of ice. At daylight February 27, all electric lines running east and west had enough ice to weight them nearly to the ground. The lines running north and south were also iced but not as heavy as the east and west lines.

About 7 a. m. a fresh wind blew from the north for about thirty minutes and during this blow the lines running east and west suffered their most damage. As they were already loaded to capacity with ice, the added burden of wind pressure was more than they could stand. Many anchors were pulled out of the ground by the excessive strains. Several poles broke off and the wires were badly broken.

Many wires leading to houses were pulled loose and broken when trees, overloaded with ice, would break and fall on them.

The storm area included the Wise County, Denton County, Grayson-Collin, Fannin County and the Cooke County Electric Cooperatives.

All cooperatives in the state that had someone they could send to the stricken area responded immediately to the calls for assistance. The Job Training and Safety instructors from Texas A. & M. College arrived to encourage safety and

(Cont'd on page 4)



# LIFE-SAVING MEDAL RECOMMENDED

(Cont'd from "RESUSCITATION SAVES LINEMAN," page 1)

## DISCUSSION:

The foreman and the crew did an excellent job of resuscitation. They are to be congratulated. We are submitting this case to the National Safety Council, recommending the President's Life-Saving Medal for the foreman.

We would not recommend that the tree be removed in such a way that it might contact the energized

line. It would have been far better to de-energize the line first if there was any possibility of the tree falling into the line. However, it is often necessary to attach side lines to trees to determine their fall by means of a bull rope tied off to the side. In some cases it may be necessary to bury a temporary anchor for this purpose, and often it is advisable to top the tree first. In this case, however, if this man were placed there to guide the tree by manipulating the winch line, he certainly should have been wearing rubber gloves.

## TEXAS ICE STORM

(Cont'd from page 2)

to help organize the work. Most of the crews from other cooperatives reported to Denton, the first town to get communication lines repaired to the outside world. Emergency crews were organized and repairs started. They were dispatched to the other cooperatives and divided so service could be restored in all of them as soon as possible.

In organizing the crews, the system used was that where one or more crews were working on the same line, a crew chief was appointed on the same line. His duties were to do all the energizing of the lines. Although only one man did the energizing, all crews worked between grounds, because of the possibility of the public utilities' lines being down on the cooperative lines. Then, too, these other lines in some cases had been picked up and energized. There was an ever present possibility of their lines breaking at weakened places from the ice and falling into the cooperative lines.

Damage was great; working conditions at the worst, and most of the roads muddy. To get through to repair the lines, tractors, horses and any other type of conveyance was used. Often the line crews had to walk and carry their repair material.

We in the Job Training and Safety Program felt that during this emergency the opportunity of real job training was the best ever afforded. Many men with ten to twelve years' experience found this work of picking up and rebuilding lines a new one. The younger men in the trade really "grew up" in this period of a couple of weeks. It was an opportunity to show the best methods of doing the job. We feel that every man who worked in this storm got experience that would have taken him many years to acquire on normal work. Trucks and tools of every type were represented, and the boys have a lot of new ideas on how to equip and arrange their own trucks.

## STRAINS AND SPRAINS

Confusion often exists as to the difference between strains and sprains; the two words are used interchangeably. Although these injuries are similar in nature, they refer to different members of the body.

A strain is the overstretching of a muscle or a tendon of a muscle, while sprains are injuries due to the stretching or tearing of the ligaments or other tissues around a joint. Remember—strains involve muscles or tendons, while sprains involve joints. That information is necessary in recognizing the two injuries and is important in first aid.

The cooperative spirit was demonstrated to its fullest. The one and only thought of each man was to get the lines repaired and service restored to the farms and homes as quickly as possible. Each cooperative in this area serves at least seventy-five Grade A dairies that supply milk and butter to a large number of the Army camps in this region and also to war workers in the territory which includes Fort Worth, Dallas, Denison, Sherman and McKinney. There are several large poultry farms and hatcheries in this area, not to mention water pumps and refrigeration units and other home appliances that most of the homes have.

The Job Training and Safety instructors want to thank all managers and workmen for their cooperation in making this big disaster to the lines a milepost in the progress of safe working habits. It was not by luck that this job was completed without a single accident, but by every man doing his job correctly and safely, not only for himself, but for his fellow workmen. When summing up, very few hazards can be eliminated from the list always present in this type of an emergency. Mud roads, leaning poles, slick pavement, strange territory of lines and every conceivable hazard that one can find were present.

—E. F. Nauert, Texas Safety and Job Training Supervisor.

# CHECK YOUR HOUSEKEEPING

Last month "THE LINEMAN" pointed out many housekeeping hints which you can use to guard safety of co-op employees. Here is Part II of "Check Your Housekeeping"—a list of questions that will help you to keep accidents down to a minimum. Can you answer them all satisfactorily? Answer questions yes or no:

## HAND TRUCKS:

Are wheels and axles in good condition? \_\_\_\_ Are cotter pins (keeping wheels on axles) in good condition? \_\_\_\_ Are handles in good condition? \_\_\_\_ Are there knuckle guards on handles of wheelbarrows? \_\_\_\_

## FLOORS:

Are the floors in safe condition? (Not uneven, slippery) \_\_\_\_ No unguarded floor openings? \_\_\_\_ Is the office floor treated with a non-skid wax? \_\_\_\_

## PLATFORMS:

Are platforms, or overhead walkways, provided with standard hand rails 42" high with a midrail halfway between base and top rail? \_\_\_\_ Are toe boards provided? \_\_\_\_ Are platforms in safe condition; no loose boards or floor plates? \_\_\_\_ Are transformer platforms level with truck bed? \_\_\_\_

## STAIRS AND RAILINGS:

Are treads in good condition? \_\_\_\_ Is nosing on stairs in good condition? \_\_\_\_ Are risers filled in? \_\_\_\_ Are risers in good condition? \_\_\_\_ Are risers of uniform height? \_\_\_\_ Are hand rails provided on each side of stairs? \_\_\_\_ Is there sufficient light on stairs and stair landings and halls? \_\_\_\_

## EXPOSED CURRENT-CARRYING

### PARTS:

Are all conductors (except those connected to circuits above 300 volts to ground) isolated, insulated or guarded? \_\_\_\_ What is the condition? \_\_\_\_

Exposed parts less than 300 volts should be protected in some suitable way against possible accidental contact.



## FIRE-FIGHTING EQUIPMENT:

Condition of fire extinguishers, sand pails, sprinklers, water barrels and buckets, fire doors \_\_\_\_ Are fire extinguishers recharged immediately after use? \_\_\_\_

## SANITATION:

Are toilets and washrooms properly ventilated? \_\_\_\_ Condition of toilets, washrooms, showers, lockers, drinking fountains, cuspidors \_\_\_\_

## LIGHTING:

Is there sufficient light at working areas? \_\_\_\_ Is lighting so arranged to minimize glare and shadow as much as possible? \_\_\_\_ Are light bulbs kept clean? \_\_\_\_ Are proper type of reflectors installed? \_\_\_\_ Are reflectors kept clean? \_\_\_\_ Is there sufficient light in plant yard? \_\_\_\_

## ELECTRICAL EQUIPMENT:

Is wiring placed in conduit? \_\_\_\_ Are there any exposed electric switches? \_\_\_\_ Are there any hanging or loose wires? \_\_\_\_ Are motors properly grounded? \_\_\_\_ Are extension cords in safe condition? \_\_\_\_ Are portable electric tools grounded? \_\_\_\_ Are electric control and electric panel boards enclosed at each end? \_\_\_\_

Do you have a safety rule that only a qualified electrician is to make electric repairs? \_\_\_\_

## YARDS AND BUILDINGS:

Note condition of plant yards, storing and piling of material. Openings in yards guarded? \_\_\_\_ Walkways kept clear? \_\_\_\_ Proper yard lighting? \_\_\_\_

Buildings: Check over floor loads \_\_\_\_ Condition of floors \_\_\_\_ Condition of walls \_\_\_\_ Condition of roof \_\_\_\_ Windows \_\_\_\_ Doors \_\_\_\_